SEQUENCE LISTING

(1) GENERAL INFORMATION:

    (i) APPLICANT: PÄÄBO, Svante
              KILGER, Christian

    (ii) TITLE OF INVENTION: Method for uncoupled, direct, exponential amplification and sequencing of DNA molecules with the addition of a second thermostable DNA polymerase and its application

    (iii) NUMBER OF SEQUENCES: 5

    (iv) CORRESPONDENCE ADDRESS:
        (A) ADDRESSEE: Nikaido, Marmelstein, Murray & Oram LLP
        (B) STREET: 655 Fifteenth Street, N.W.; Stuite 330
        (C) CITY: Washington
        (D) STATE: D.C.
        (E) COUNTRY: U.S.A.
        (F) ZIP: 20005-5701

    (v) COMPUTER READABLE FORM:
        (A) MEDIUM TYPE: Floppy disk
        (B) COMPUTER: IBM PC compatible
        (C) OPERATING SYSTEM: PC-DOS/MS-DOS
        (D) SOFTWARE: PatentIn Release #1.0, Version #1.30

    (vi) CURRENT APPLICATION DATA
        (A) APPLICATION NUMBER: 08/991,184
        (B) FILING DATE: 16-DEC-1997
        (C) CLASSIFICATION:

    (vi) PRIOR APPLICATION DATA
        (A) APPLICATION NUMBER: DE 196 53 494.1
        (B) FILING DATE: 20-DEC-1996
        (C) CLASSIFICATION:

    (viii) ATTORNEY/AGENT INFORMATION:
        (A) NAME: Wong, King L.
        (B) REGISTRATION NUMBER: 37,500
        (C) REFERENCE DOCKET NUMBER: 1614-7090

    (ix) TELECOMMUNICATION INFORMATION:
        (A) TELEPHONE: (202) 638-5000
        (B) TELEFAX: (202) 638-4810

(2) INFORMATION FOR SEQ ID NO: 1:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 25 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

```
    (ii) MOLECULE TYPE: other nucleic acid
         (A) DESCRIPTION:   /desc = "oligonucleotide"

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

GGCTGGTCCT GCCGCTGCTT GTCAT                                      25

(2) INFORMATION FOR SEQ ID NO: 2:

    (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 27 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: single
         (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: other nucleic acid
         (A) DESCRIPTION:   /desc = "oligonucleotide"

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

CTGCTCCCCA GTGGATCGGG TGTAAAC                                    27

(2) INFORMATION FOR SEQ ID NO: 3:

    (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 27 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: single
         (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: other nucleic acid
         (A) DESCRIPTION:   /desc = "oligonucleotide"

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

CACCTTTGGG GTGGTGACAA GTGTGAT                                    27

(2) INFORMATION FOR SEQ ID NO: 4:

    (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 24 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: single
         (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: other nucleic acid
         (A) DESCRIPTION:   /desc = "oligonucleotide"

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

CGACGTTGTA AAACGACGGC CAGT                                       24

(2) INFORMATION FOR SEQ ID NO: 5:

    (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 17 base pairs
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        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

   (ii) MOLECULE TYPE: other nucleic acid
        (A) DESCRIPTION:    /desc = "oligonucleotide"

   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
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CAGGAAACAG CTATGAC   17